===
Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: markspencer

Timestamp: [year=2009; month=8; day=11; hr=14; min=27; sec=42; ms=611;]
===

Application No: 10597305 Version No: 2.0

Input Set:

Output Set:

```
          Started:  2009-07-28 19:12:16.496
         Finished:  2009-07-28 19:12:18.244
          Elapsed:  0 hr(s) 0 min(s) 1 sec(s) 748 ms
   Total Warnings:  50
     Total Errors:  0
No. of SeqIDs Defined:  50
Actual SeqID Count:  50
```

Error code   Error Description

W	213	Artificial or Unknown found in <213> in SEQ ID (1)
W	213	Artificial or Unknown found in <213> in SEQ ID (2)
W	213	Artificial or Unknown found in <213> in SEQ ID (3)
W	213	Artificial or Unknown found in <213> in SEQ ID (4)
W	213	Artificial or Unknown found in <213> in SEQ ID (5)
W	213	Artificial or Unknown found in <213> in SEQ ID (6)
W	213	Artificial or Unknown found in <213> in SEQ ID (7)
W	213	Artificial or Unknown found in <213> in SEQ ID (8)
W	213	Artificial or Unknown found in <213> in SEQ ID (9)
W	213	Artificial or Unknown found in <213> in SEQ ID (10)
W	213	Artificial or Unknown found in <213> in SEQ ID (11)
W	213	Artificial or Unknown found in <213> in SEQ ID (12)
W	213	Artificial or Unknown found in <213> in SEQ ID (13)
W	213	Artificial or Unknown found in <213> in SEQ ID (14)
W	213	Artificial or Unknown found in <213> in SEQ ID (15)
W	213	Artificial or Unknown found in <213> in SEQ ID (16)
W	213	Artificial or Unknown found in <213> in SEQ ID (17)
W	213	Artificial or Unknown found in <213> in SEQ ID (18)
W	213	Artificial or Unknown found in <213> in SEQ ID (19)
W	213	Artificial or Unknown found in <213> in SEQ ID (20)

```
                Input Set:


                Output Set:



               Started:   2009-07-28 19:12:16.496
              Finished:   2009-07-28 19:12:18.244
               Elapsed:   0 hr(s) 0 min(s) 1 sec(s) 748 ms
        Total Warnings:   50
          Total Errors:   0
  No. of SeqIDs Defined:   50
    Actual SeqID Count:    50
```

Error code   Error Description

                This error has occured more than 20 times, will not be displayed

<110>   Korea Research Institute of Bioscience and Biotechnology
         CHOI, Inpyo

<120>   Differentiation regulating agent containing gene which regulating

<130>   58049-00034

<140>   10597305
<141>   2006-07-19

<160>   50

<170>   PatentIn version 3.5

<210>   1
<211>   16
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   M13 forward primer

<400>   1
gaccggcagc aaaatg   16

<210>   2
<211>   16
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   M13 reverse primer

<400>   2
caaaagggtc agtgct   16

<210>   3
<211>   20
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   forward primer for gamma-parvin

<400>   3
ctctgaagga cccagcagtc   20

<210>   4
<211>   20
<212>   DNA
<213>   Artificial Sequence

<220>
<223> reverse primer for gamma-parvin

<400> 4
gcagctgtag ggatagcctg   20

<210> 5
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for Foxp1c

<400> 5
cgaatctcca gaaaagcagc   20

<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for Foxp1c

<400> 6
aaatctggac tgtggttggc   20

<210> 7
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for c-myc

<400> 7
gcccagtgag gatatctgga   20

<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for c-myc

<400> 8
gaatcggacg aggtacagga   20

<210> 9

<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for KC1

<400> 9
ggcaacgaga agatcaccat   20

<210> 10
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for KC1

<400> 10
ccacattgac ctggcctact   20

<210> 11
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for PA-PRP

<400> 11
cttattgttg gtgctgccct   20

<210> 12
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for PA-PRP

<400> 12
ggttggtcga ggagtgttgt   20

<210> 13
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for IRAK

<400> 13
gaagccttgc cagatagcag   20

<210> 14
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for IRAK

<400> 14
gcaagacaag aaagcaaggg   20

<210> 15
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for L10A

<400> 15
cacacattgg gcttcacaac   20

<210> 16
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for L10A

<400> 16
tgagttcaca ttccagcagc   20

<210> 17
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for pre-pro-proteinase 3

<400> 17
acgtgcttct cctccagcta   20

<210> 18
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for pre-pro-proteinase 3

<400> 18
agggaacaga gctgactcca   20

<210> 19
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for myeloblastosis oncogene

<400> 19
gaagaaagtg cctcaccagc   20

<210> 20
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for myeloblastosis oncogene

<400> 20
gttcaagaac tgcgagggag   20

<210> 21
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for CBP35

<400> 21
ctcctcctag tgcctacccc   20

<210> 22
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for CBP35

<400> 22
gtcacgactg atccccagtt   20

<210> 23
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for IL-7 receptor

<400> 23
tgccagattc atgaggtgaa   20

<210> 24
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for IL-7 receptor

<400> 24
ggagagcaag cattccagac   20

<210> 25
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for LPL

<400> 25
cagctgggcc taactttgag   20

<210> 26
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for LPL

<400> 26
ccatcctcag tcccagaaaa   20

<210> 27
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for ferritin H chain

<400> 27
gaccgagatg atgtggctct   20

<210> 28

```
<211>  20
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  reverse primer for ferritin H chain

<400>  28
aaaagatgaa ggcagcctga                                              20


<210>  29
<211>  20
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  forward primer for MMP 12

<400>  29
tttggagctc acggagactt                                              20


<210>  30
<211>  20
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  reverse primer for MMP 12

<400>  30
gcttggccat atggaagaaa                                              20


<210>  31
<211>  20
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  forward primer for RGS

<400>  31
gcagcaacct agaagccatc                                              20


<210>  32
<211>  20
<212>  DNA
<213>  Artificial Sequence

<220>
<223>  reverse primer for RGS

<400>  32
tgtgagacgg caagaatgag                                              20
```

```
<210>   33
<211>   20
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   forward primer for Serpina3G

<400>   33
ttcaacctca cagagacccc                                                      20


<210>   34
<211>   20
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   reverse primer for Serpina3G

<400>   34
gtaagcttgc ttccacctgc                                                      20


<210>   35
<211>   20
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   forward primer for P2Y

<400>   35
gccagaaact ggaagcgtag                                                      20


<210>   36
<211>   20
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   reverse primer for P2Y

<400>   36
ggtcacgaaa ctctgaagcc                                                      20


<210>   37
<211>   20
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   forward primer for lymphocyte-specific PTK
```

```
<400>   37
gaatctgagc cgtaaggacg                                          20


<210>   38
<211>   20
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   reverse primer for lymphocyte-specific PTK

<400>   38
ctgcataaag ccggactagc                                          20


<210>   39
<211>   20
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   forward primer for semaphorin 6A precursor

<400>   39
aagccaccta gagcgatttg                                          20


<210>   40
<211>   20
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   everse primer for semaphorin 6A precursor

<400>   40
gcttccagaa gatcacaggg                                          20


<210>   41
<211>   34
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   forward primer for CD122

<400>   41
gtcgacgctc ctctcagctg tgatggctac cata                          34


<210>   42
<211>   36
<212>   DNA
<213>   Artificial Sequence
```

<220>
<223> reverse primer for CD122

<400> 42
ggatcccaga agacgtctac gggcctcaaa ttccaa   36

<210> 43
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for perforin

<400> 43
gtcacgtcga agtacttggt g   21

<210> 44
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for perforin

<400> 44
aaccagccac atagcacaca t   21

<210> 45
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> forward primer for bata-actin

<400> 45
gtggggcgcc ccaggcacca   20

<210> 46
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> reverse primer for beta-actin

<400> 46
ctccttaatg tcacgcacga tttc   24

<210> 47

<211> 1425
<212> DNA
<213> Artificial Sequence

<220>
<223> Mus musculus

<400> 47
atggagagca aagccctgct cctggtggtc ctgggagttt ggctccagag tttgaccgcc   60

ttccgaggag gggtggccgc agcagacgca ggaagagatt tctcagacat cgaaagcaaa   120

tttgccctaa ggacccctga agacacagct gaggacactt gtcatctcat tcctggatta   180

gcagactctg tgtctaactg ccacttcaac cacagcagca agaccttcgt ggtgatccat   240

ggatggacgg taacgggaat gtatgagagt gggtgcccca acttgtggc cgccctgtac   300

aagagagaac ctgactccaa tgtcattgta gtagactggt tgtatcgggc ccagcaacat   360

tatccagtgt cagctggcta caccaagctg gtgggaaatg atgtggccag attcatcaac   420

tggatggagg aggagtttaa gtaccccta gacaacgtcc acctcttagg gtacagcctt   480

ggagcccatg ctgctggcgt agcaggaagt ctgaccaata gaaggtcaa tagaattact   540

ggtttggatc cagctgggcc taactttgag tatgcagaag cccccagtcg cctttctcct   600

gatgacgctg attttgtaga gtcttacac acatttacca gggggtcacc tggtcgaagt   660

attgggatcc agaaaccagt ggggcatgtt gacatttatc ccaatggagg cactttccag   720

ccaggatgca acattggaga agccatccgt gtgattgcag agagaggact cggagacgtg   780

gaccagctgg tgaagtgctc gcatgagcgc tccattcatc tcttcattga ctccctgctg   840

aatgaagaaa accccagcaa agcatacagg tgcaactcca ggaagccttt gagaaaggg   900

ctctgcctga gttgtagaaa gaatcgctgt aacaatctgg gctatgagat caacaaggtc   960

agagccaaga gaagcagcaa gatgtacctg aagactcgct ctcagatgcc ctacaaagtg   1020

ttccattacc aagtcaagat tcacttttct gggactgaga atggcaagca cacaaccag   1080

gccttcgaaa tttctctgta cggcacagtg gccgagagcg agaacattcc cttcaccctg   1140

cccgaggttt ccacaaataa aacctactcc ttcttgattt acacggaggt ggacatcgga   1200

gaactgctca tgatgaagct taagtggatg agcgactcct acttcagctg gcccgactgg   1260

tggagcagcc ccagcttcgt catcgagagg atccgagtga aagccggaga gactcagaaa   1320

aaggtcatct ctgtgctagg ggagaaagtt tctcatctgc agaagggaaa ggactcagca   1380

gtgtttgtga aatgccatga caagtctctg aagaagtctg gctga   1425

<210> 48
<211> 474
<212> PRT
<213> Artificial Sequence

<220>
<223> Mus musculus

<400> 48

Met Glu Ser Lys Ala Leu Leu Leu Val Val Leu Gly Val Trp Leu Gln
1   5   10   15

Ser Leu Thr Ala Phe Arg Gly Gly Val Ala Ala Ala Asp Ala Gly Arg
                20   25   30

Asp Phe Ser Asp Ile Glu Ser Lys Phe Ala Leu Arg Thr Pro Glu Asp
            35   40   45

Thr Ala Glu Asp Thr Cys His Leu Ile Pro Gly Leu Ala Asp Ser Val
        50   55   60

Ser Asn Cys His Phe Asn His Ser Ser Lys Thr Phe Val Val Ile His
65   70   75   80

Gly Trp Thr Val Thr Gly Met Tyr Glu Ser Trp Val Pro Lys Leu Val
                85   90   95

Ala Ala Leu Tyr Lys Arg Glu Pro Asp Ser Asn Val Ile Val Val Asp
                100   105   110

Trp Leu Tyr Arg Ala Gln Gln His Tyr Pro Val Ser Ala Gly Tyr Thr
            115   120   125

Lys Leu Val Gly Asn Asp Val Ala Arg Phe Ile Asn Trp Met Glu Glu
        130   135   140

Glu Phe Lys Tyr Pro Leu Asp Asn Val His Leu Leu Gly Tyr Ser Leu
145   150   155   160

Gly Ala His Ala Ala Gly Val Ala Gly Ser Leu Thr Asn Lys Lys Val
                165   170   175

Asn Arg Ile Thr Gly Leu Asp Pro Ala Gly Pro Asn Phe Glu Tyr Ala
                180   185   190

```
Glu Ala Pro Ser Arg Leu Ser Pro Asp Asp Ala Asp Phe Val Asp Val
    195                 200                 205

Leu His Thr Phe Thr Arg Gly Ser Pro Gly Arg Ser Ile Gly Ile Gln
    210                 215                 220

Lys Pro Val Gly His Val Asp Ile Tyr Pro Asn Gly Gly Thr Phe Gln
225                 230                 235                 240

Pro Gly Cys Asn Ile Gly Glu Ala Ile Arg Val Ile Ala Glu Arg Gly
            245                 250                 255

Leu Gly Asp Val Asp Gln Leu Val Lys Cys Ser His Glu Arg Ser Ile
            260                 265                 270

His Leu Phe Ile Asp Ser Leu Leu Asn Glu Glu Asn Pro Ser Lys Ala
    275                 280                 285

Tyr Arg Cys Asn Ser Lys Glu Ala Phe Glu Lys Gly Leu Cys Leu Ser
    290                 295                 300

Cys Arg Lys Asn Arg Cys Asn Asn Leu Gly Tyr Glu Ile Asn Lys Val
305                 310                 315                 320

Arg Ala Lys Arg Ser Ser Lys Met Tyr Leu Lys Thr Arg Ser Gln Met
            325                 330                 335

Pro Tyr Lys Val Phe His Tyr Gln Val Lys Ile His Phe Ser Gly Thr
            340                 345                 350

Glu Asn Gly Lys Gln His Asn Gln Ala Phe Glu Ile Ser Leu Tyr Gly
    355                 360                 365

Thr Val Ala Glu Ser Glu Asn Ile Pro Phe Thr Leu Pro Glu Val Ser
    370                 375                 380

Thr Asn Lys Thr Tyr Ser Phe Leu Ile Tyr Thr Glu Val Asp Ile Gly
385                 390                 395                 400

Glu Leu Leu Met Met Lys Leu Lys Trp Met Ser Asp Ser Tyr Phe Ser
            405                 410                 415
```

```
Trp Pro Asp Trp Trp Ser Ser Pro Ser Phe Val Ile Glu Arg Ile Arg
            420                 425             430


Val Lys Ala Gly Glu Thr Gln Lys Lys Val Ile Phe Cys Ala Arg Glu
            435                 440             445


Lys Val Ser His Leu Gln Lys Gly Lys Asp Ser Ala Val Phe Val Lys
         450                 455             460


Cys His Asp Lys Ser Leu Lys Lys Ser Gly
465                 470



<210>   49
<211>   182
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   Mus musculus

<400>   49

Met Thr Thr Ala Ser Pro Ser Gln Val Arg Gln Asn Tyr His Gln Asp
1               5                   10                  15


Ala Glu Ala Ala Ile Asn Arg Gln Ile Asn Leu Glu Leu Tyr Ala Ser
            20                  25                  30


Tyr Val Tyr Leu Ser Met Ser Cys Tyr Phe Asp Arg Asp Asp Val Ala
         35                  40                  45


Leu Lys Asn Phe Ala Lys Tyr Phe Leu His Gln Ser His Glu Glu Arg
   50                  55                  60


Glu His Ala Glu Lys Leu Met Lys Leu Gln Asn Gln Arg Gly Gly Arg
65                  70                  75                  80


Ile Phe Leu Gln Asp Ile Lys Lys Pro Asp Arg Asp Asp Trp Glu Ser
            85                  90                  95


Gly Leu Asn Ala Met Glu Cys Ala Leu His Leu Glu Lys Ser Val Asn
            100                 105                 110


Gln Ser Leu Leu Glu Leu His Lys Leu Ala Thr Asp Lys Asn Asp Pro
         115                 120                 125
```

His Leu Cys Asp Phe Ile Glu Thr Tyr Tyr Leu Ser Glu Gln Val Lys
    130   135   140

Ser Ile Lys Glu Leu Gly Asp His Val Thr Asn Leu Arg Lys Met Gly
145   150   155   160

Ala Pro Glu Ala Gly Met Ala Glu Tyr Leu Phe Asp Lys His Thr Leu
                165   170   175

Gly His Gly Asp Glu Ser
                180

<210>   50
<211>   860
<212>   DNA
<213>   Artificial Sequence

<220>
<223>   Mus musculus

<400>   50
ccgcggtttc ctgcttcaac agtgcttgaa cggaacccgg tgctcgaccc ctccgacccc   60

cgccggccgc ttcgagcctg agccctttgc aacttcgtcg ttccgccgct ccagcgtcgc   120

caccgcgcct cgccccgccg ccaccatgac caccgcgtct ccctcgcaag tgcgccagaa   180

ctaccaccag gacgcggagg ctgccatcaa ccgccagatc aacctggagt